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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,471	05/07/2001	Tzueng-Yau Lin	81842.0005	3597

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HOGAN & HARTSON L.L.P.
1999 AVENUE OF THE STARS
SUITE 1400
LOS ANGELES, CA 90067

EXAMINER	
GIESY, ADAM	

ART UNIT	PAPER NUMBER
2627	

MAIL DATE	DELIVERY MODE
07/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/851,471	LIN, TZUENG-YAU	
	Examiner	Art Unit	
	Adam R. Giesy	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 18-23 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a decoder core processing a substream of data without buffering, does not reasonably provide enablement for a decoder core processing more than one substream without buffering. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Although the specification, on page 9, lines 13-19, discloses that a certain decoder core is active when more than one substream is present, the specification does not adequately disclose how one substream is processed before a second substream without buffering. The Examiner asserts that even though both the depacketizer and the decoder core is part of the same DSP, buffering would be necessary either in the depacketizer, or in the decoder, or in between the depacketizer and the decoder within the DSP in order to buffer one signal while the other is being processed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 18-22 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art (hereinafter AAPA).

Regarding claim 18, AAPA discloses a playback system for playing audio data from a storage device, the audio data containing an access unit, the playback system comprising: a system circuit for determining a number of substreams present in the access unit (see Figure 1, element 12); a depacketizer circuit coupled to the system circuit for depacketizing the access unit (elements 14, 16, and 18); and a decoder core, wherein the depacketized access unit is transmitted directly to the decoder core without accessing an external memory device for buffering (elements 20 and 22 – note that the depacketized access unit is passed directly from the depacketizer [elements 14, 16, and 18] to the decoder cores), the decoder core decodes the depacketized access unit for a first substream of the access unit if the number of substreams is more than one (see page 4, lines 4-5), and the decoder core decodes the depacketized access unit for a second substream of the access unit after the first substream is decoded if the number of substreams is more than one (see page 4, lines 4-7 – note that only one of the decoder cores is confirmed active if there is more than one substream under basic reproduction, therefore it is inherent that one substream will be decoded before the other substream, since the decoder core cannot decode two or more substreams simultaneously).

Regarding claim 19, AAPA discloses all of the limitations of claim 18 as discussed in the claim 18 rejection above and further that the storage device is of DVD-Audio format (see page 1, lines 16-21).

Regarding claim 20, AAPA discloses all of the limitations of claim 19 as discussed in the claim 19 rejection above and further that the decoder decodes the first substream in part by extracting a restart header for determining timing for decoding the second substream (see page 4, line 21 thru page 5, line 2).

Regarding claim 21, AAPA discloses all of the limitations of claim 20 as discussed in the claim 20 rejection above and further that the decoder decodes the first substream and the second substream using Meridian Lossless Packing (MLP) decoding (see pages 2, lines 14-16).

Regarding claim 22, AAPA discloses all of the limitations of claim 19 as discussed in the claim 19 rejection above and further that the depacketizer performs depacketizing comprising: reading a major sync (page 4, lines 14-15); reading a minor sync (page 4, lines 14-15); and reading a substream directory so as to determine the number of the substreams present in the access unit (page 4, lines 15-17).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter AAPA).

Regarding claim 23, AAPA discloses all of the limitations of claim 22 as discussed in the claim 22 rejection above. AAPA discloses the claimed invention except for the depacketizer and decoder core being implemented in a single digital signal processor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a processor to implement the depacketizer and decoder components, since it has been held that forming in one piece an article, which has formerly been formed in two pieces and put together, involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1893). The term "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973).

Response to Arguments

7. Applicant's arguments filed 6/22/2007 have been fully considered but they are not persuasive.

Applicants argue, on pages 4-5 of the Response filed on 6/22/2007, that the Applicant's Admitted Prior Art (AAPA) does not disclose a depacketizer circuit and a decoder core wherein the depacketized access unit is transmitted directly to the decoder core without accessing an external memory device for buffering. Examiner respectfully disagrees. In the Final Office Action mailed on 3/15/2007, the Examiner stated that the depacketizer circuit from the admitted prior art was comprised of elements 14, 16, and 18 (see Figure 1 of current application). Examiner asserts that if

elements 14, 16, and 18 are determined to be the depacketizer, then the depacketizer circuit still does not access an external memory device for buffering.

Furthermore, the Examiner notes that buffering must occur (at some point) between the depacketizer and the decoder core if two substreams are present. If the decoder core is presented with two substreams at the same time (meaning that no buffering takes place) then the signals will combine and create a myriad of problems including noise, data loss, error correction issues and the like.

Applicants argue, on pages 5-7 of the Response, that Office Action citation used by the Examiner on page 4, lines 4-7 does not read upon the claim. Examiner respectfully disagrees. Since the citation states "[I]f there are two substreams, the decoder core 0 is active only when basic reproduction is desired...," the Examiner asserts that no declaration as to basic reproduction or otherwise can be found in the current claim, and thus the citation as noted above does read upon any decoder core that process one or more data streams.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARG 7/22/2007

THANG V. TRAN
PRIMARY EXAMINER